SMS Framework Overview and Objectives

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State of Washington

Objectives

- Near Term Risk Reduction:
  - Achieve significant environmental improvement with cleanup of highly contaminated nearshore sites and associated source control that is achievable given current conditions

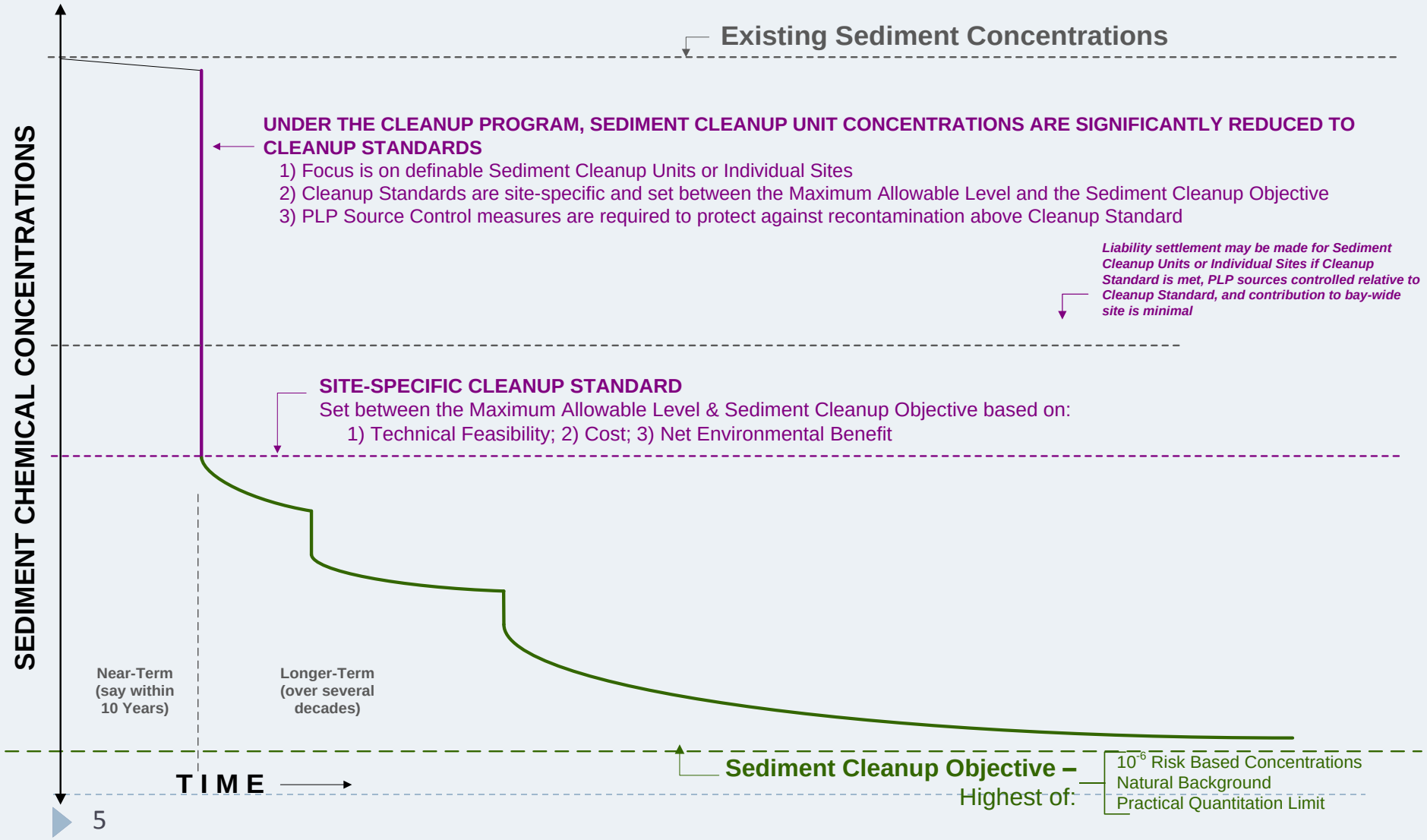
- Longer Term Risk Reduction:
  - Implement multi-program source control and additional cleanup to achieve bay-wide scale contaminant reduction over time, based on near term actions, broad participation, and systemic change.

Near Term and Longer Term Risk Reduction

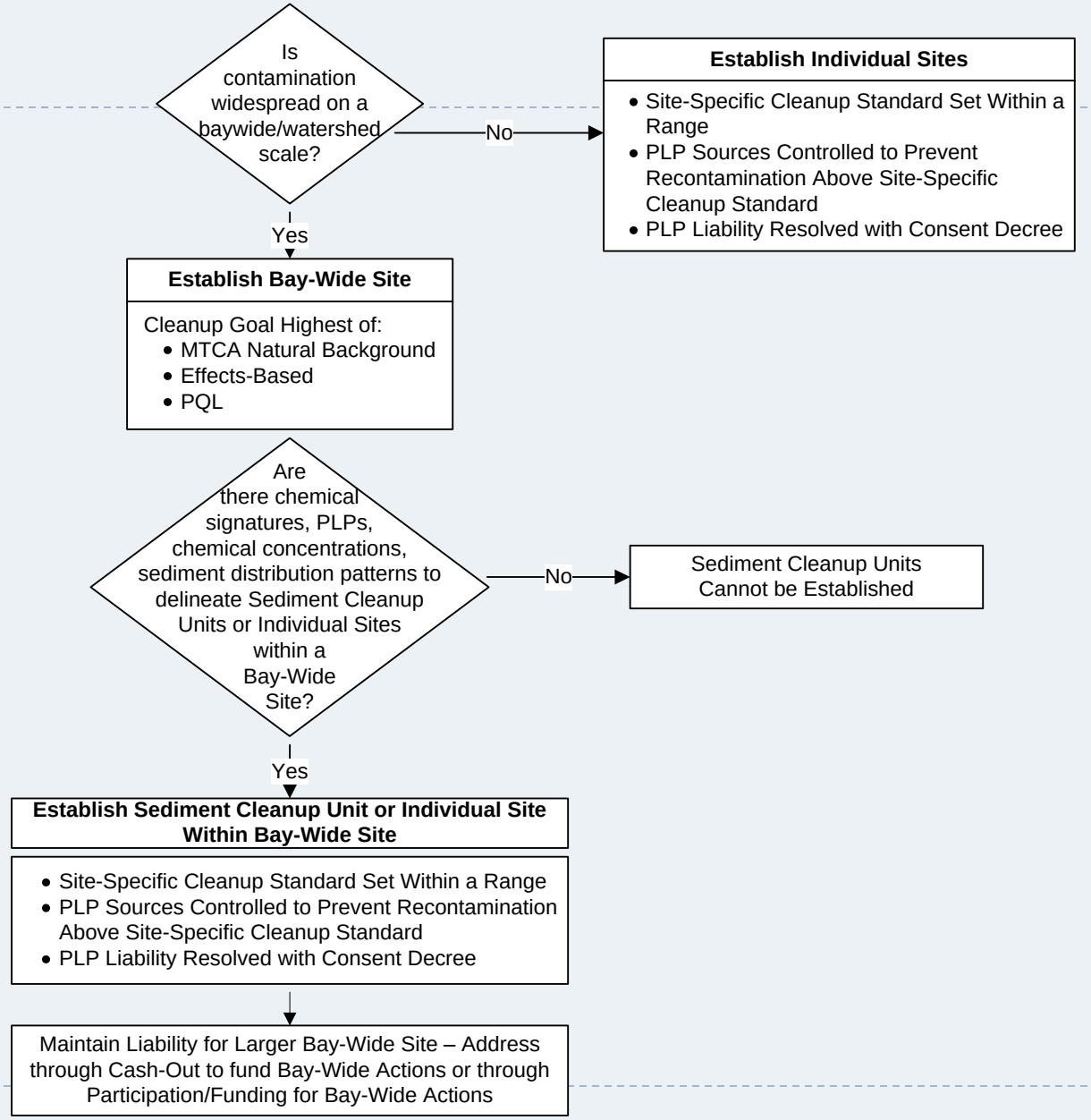
Near Term Risk Reduction
Sediment cleanup units or individual sites within a larger site

- Highly contaminated areas within a bay-wide site where there are identifiable and viable PLPs
- For these areas PLPs will be required to:
  - Actively cleanup sediments
  - Control PLP sources
  - Contribute to broader bay-wide cleanup
- Integral part of a longer term risk reduction solution.

Near Term Risk Reduction
Unit cleanup within baywide site



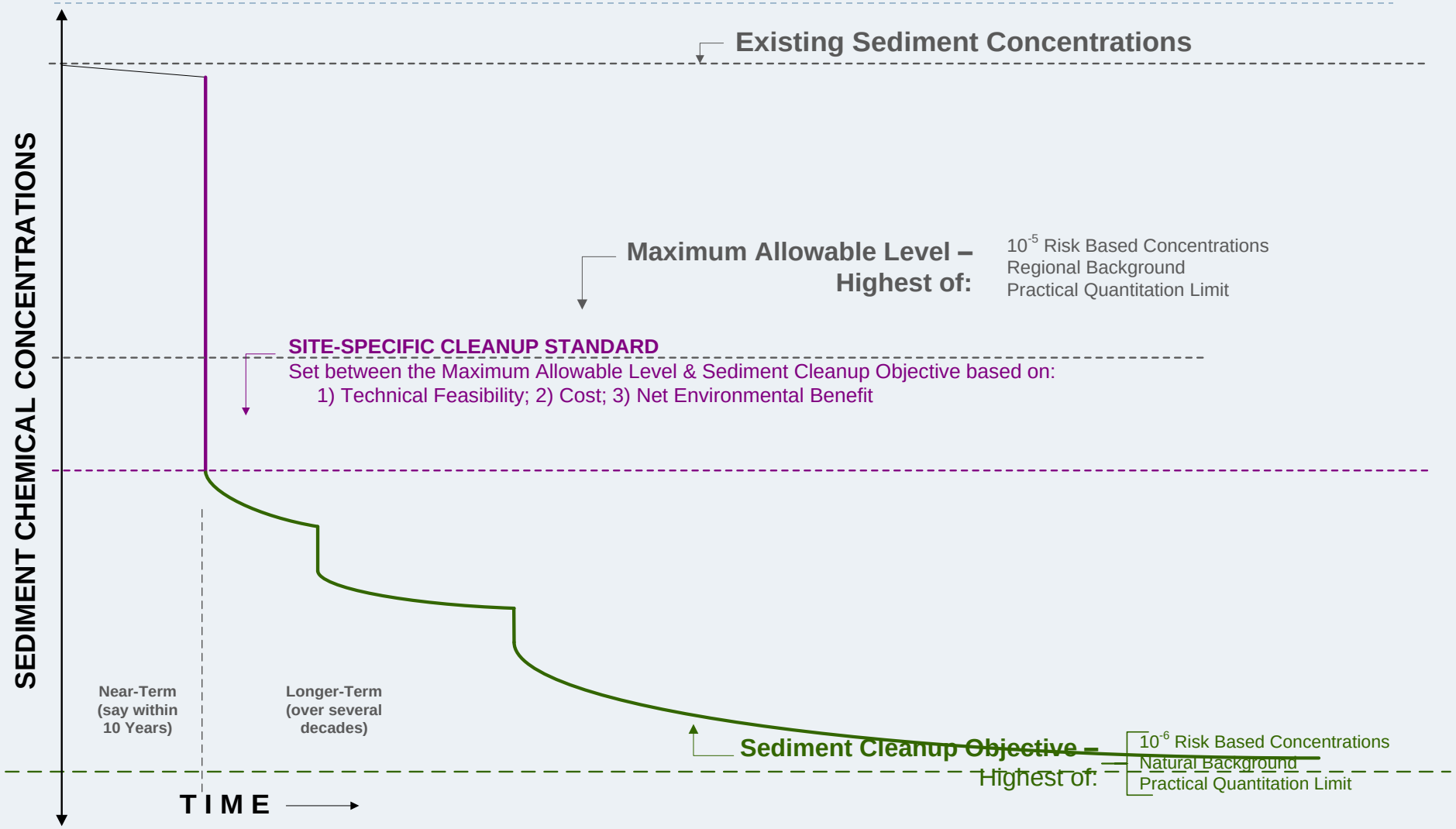
Establishing units within baywide sites



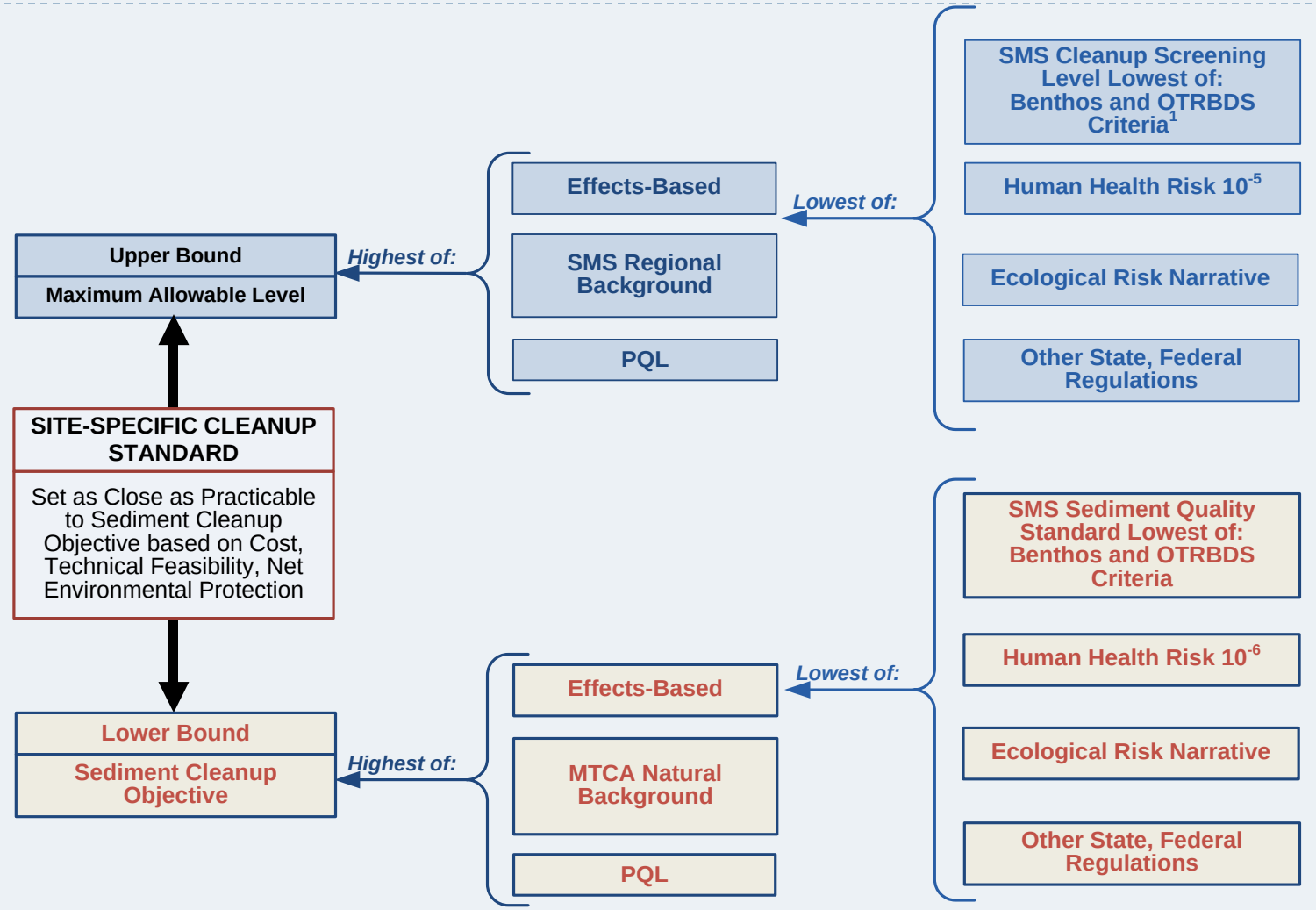
Near Term Risk Reduction
Establishing cleanup standards

- Cleanup standards achieved through active cleanup
- Cleanup standard set between Maximum Allowable Level and the Sediment Cleanup Objective
- As close as practicable to Sediment Cleanup Objective based on technical feasibility, cost, net environmental effects
- Cleanup standard achieved within 10 years of completing active cleanup.

Near Term Risk Reduction
Establishing cleanup standards



Near Term Risk Reduction
Establishing cleanup standards



Establishing Cleanup Standards
Sediment Cleanup Objective - Lower Bound

- Ultimate goal for sediment cleanup
- Numeric standard for bay-wide sites
- To be achieved over the long-term by a combination of:
  - Unit cleanups and related source control
  - Regional bay-wide cleanup actions and
  - Regional source control actions.

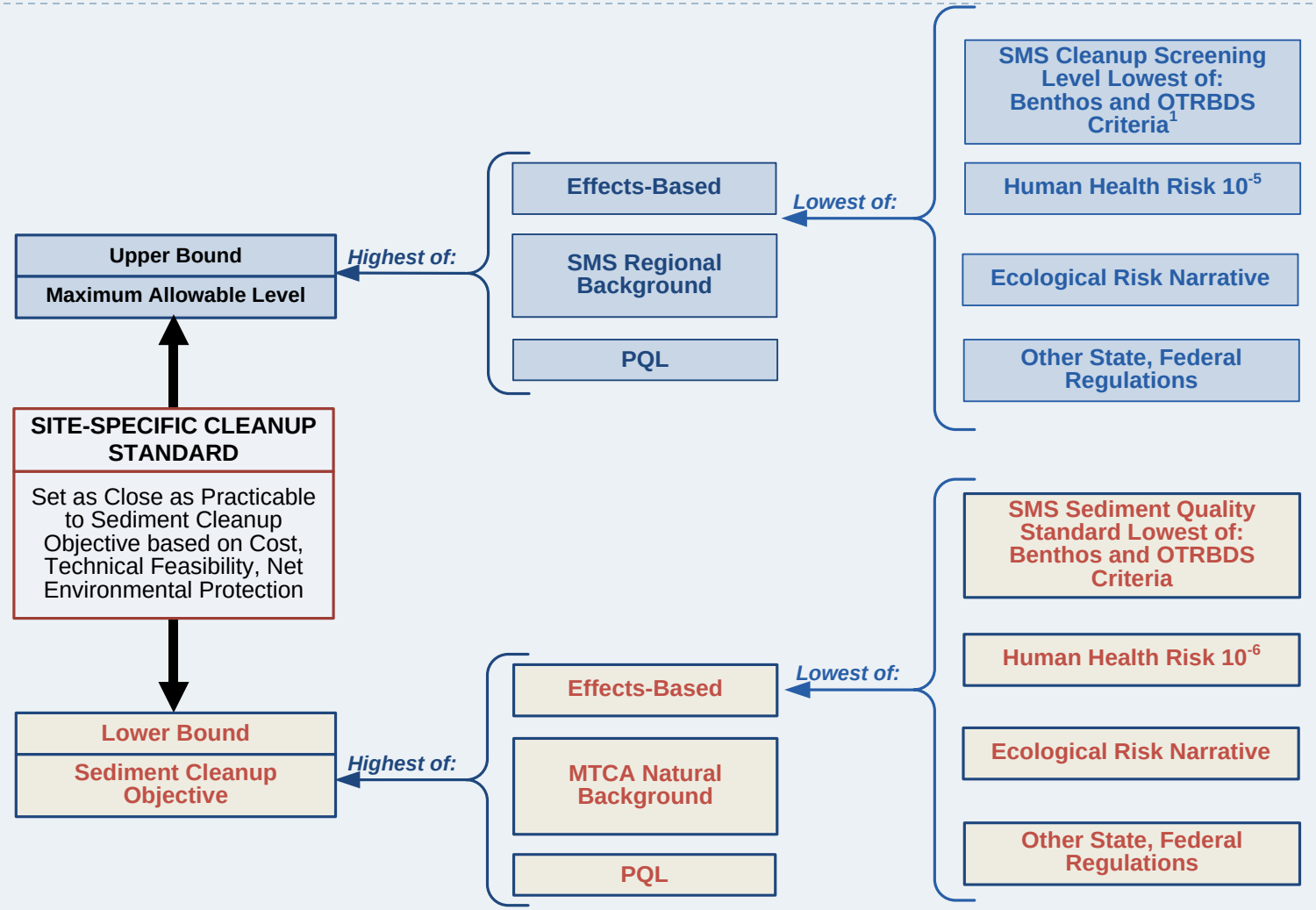
Establishing Cleanup Standards
Sediment Cleanup Objective - Lower Bound

Highest of:

- Human/Ecological Health Risk-Based Concentrations
- MTCA Natural Background
- Practical Quantitation Limit

- Human health risk is determined by:
  - 10^{-6} risk individual carcinogens
  - 10^{-5} risk multiple carcinogens
  - Hazard quotient of one
  - Default or site-specific fish consumption rate
  - Policy not yet set for other exposure parameters.

Near Term Risk Reduction
Establishing cleanup standards



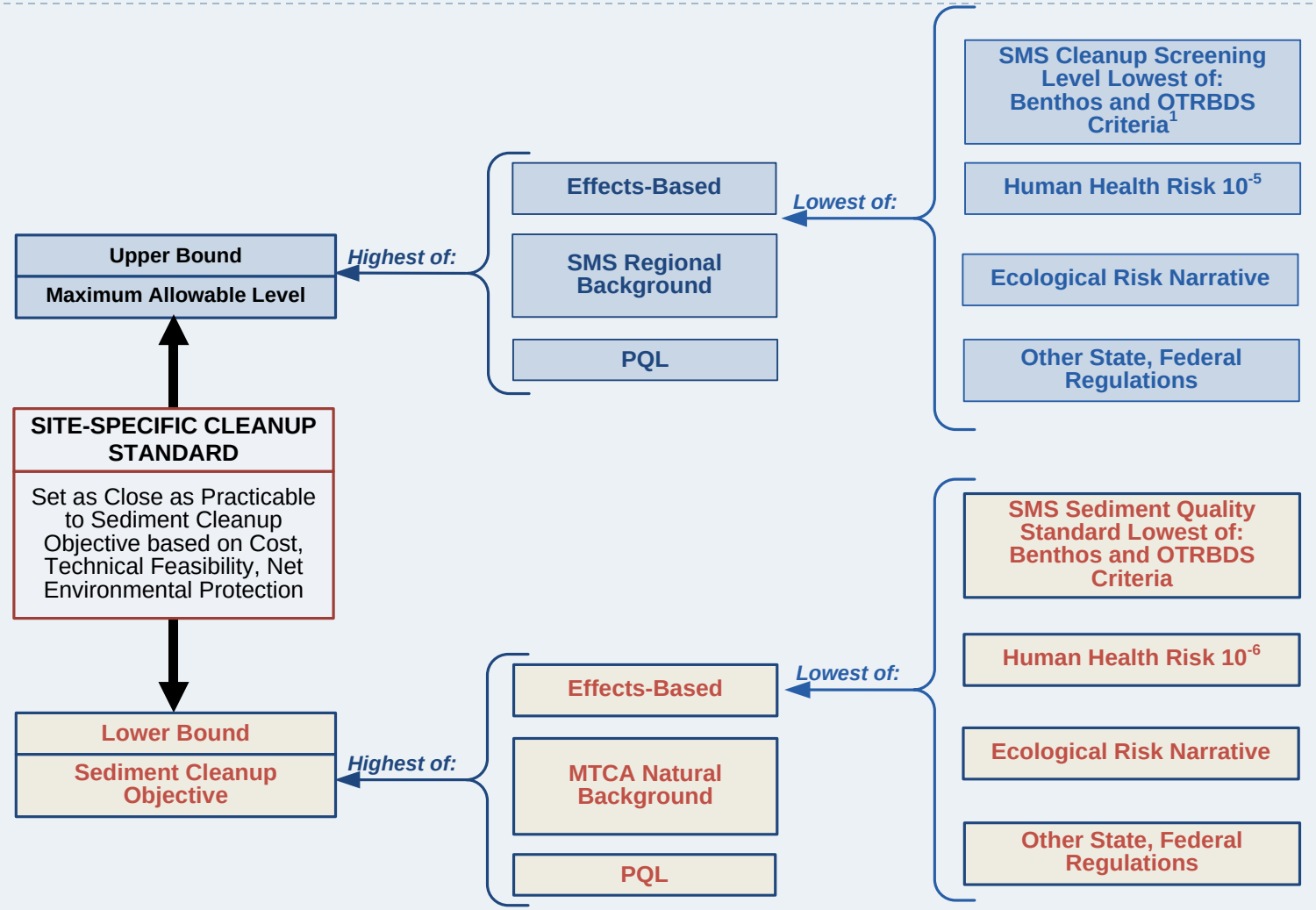
Establishing Cleanup Standards
Maximum Allowable Level - Upper Bound

Highest of:

- Human/Ecological Health Risk-Based Concentrations
- Regional Background
- Practical Quantitation Limit

- Human health risk is determined by:
  - 10^{-5} total site risk*
  - Hazard quotient of one
  - Default or site-specific fish consumption rate
  - Policy not yet set for other exposure parameters.

Near Term Risk Reduction
Establishing cleanup standards



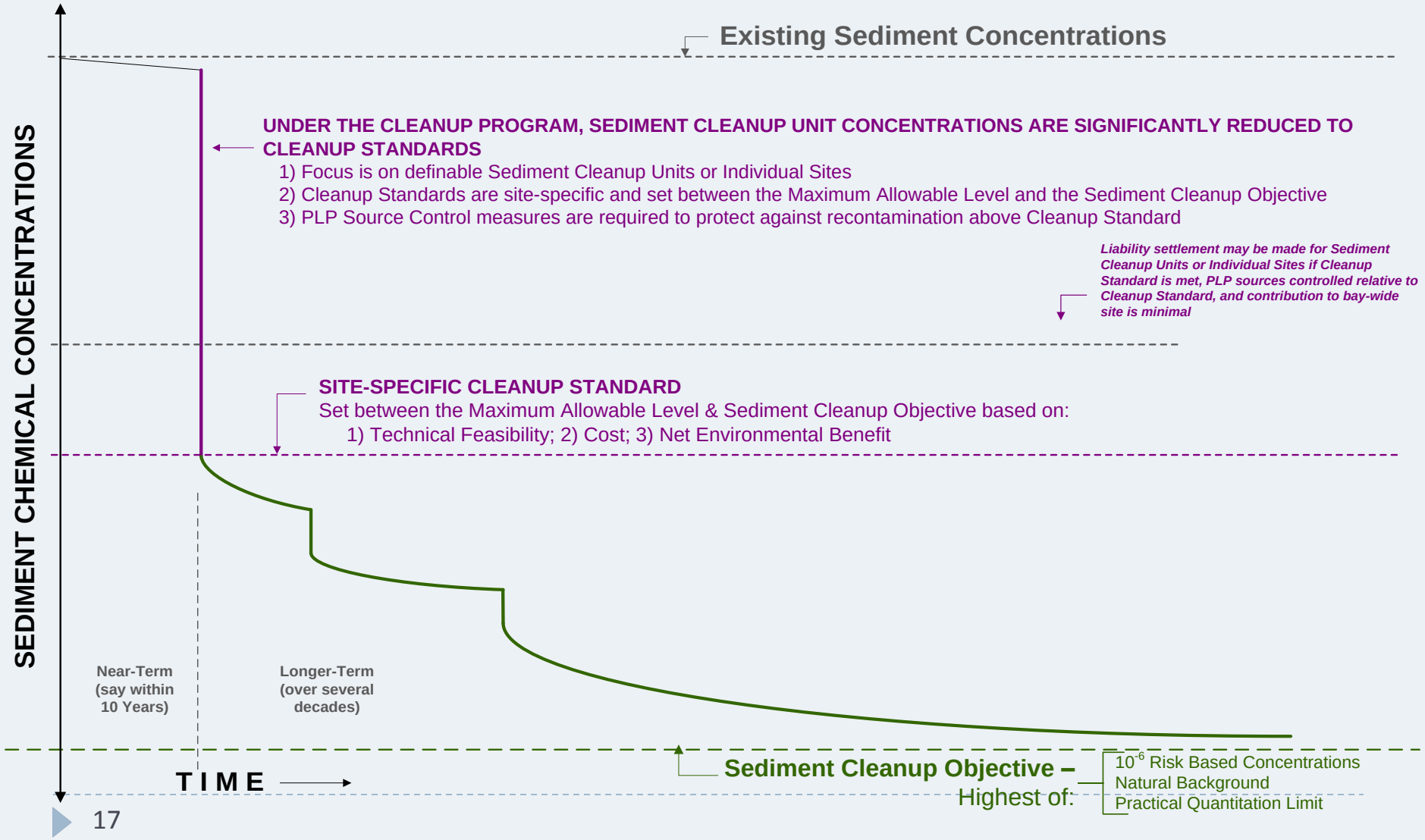
Establishing Cleanup Standards
Regional Background

- Within an Ecology defined geographic area
- The widespread concentrations of natural or anthropogenic hazardous substances in sediment
- Not primarily attributable to identifiable contaminants from specific sources or releases
- Includes low level ubiquitous concentrations
- Assumed to be higher than MTCA natural background; lower than MTCA area background
- Different types of background in SMS and MTCA.

Near Term Risk Reduction
Liability Settlement for Sediment Cleanup Units

- Consent Decree settlement for the sediment cleanup unit:
  - Cleanup standards are met
  - Source control is implemented and met
- PLP is not liable for recontamination from sources out of their control
- This is a partial settlement of liability for the site, but full settlement for the unit.

Near Term Risk Reduction
Liability settlement for sediment cleanup unit



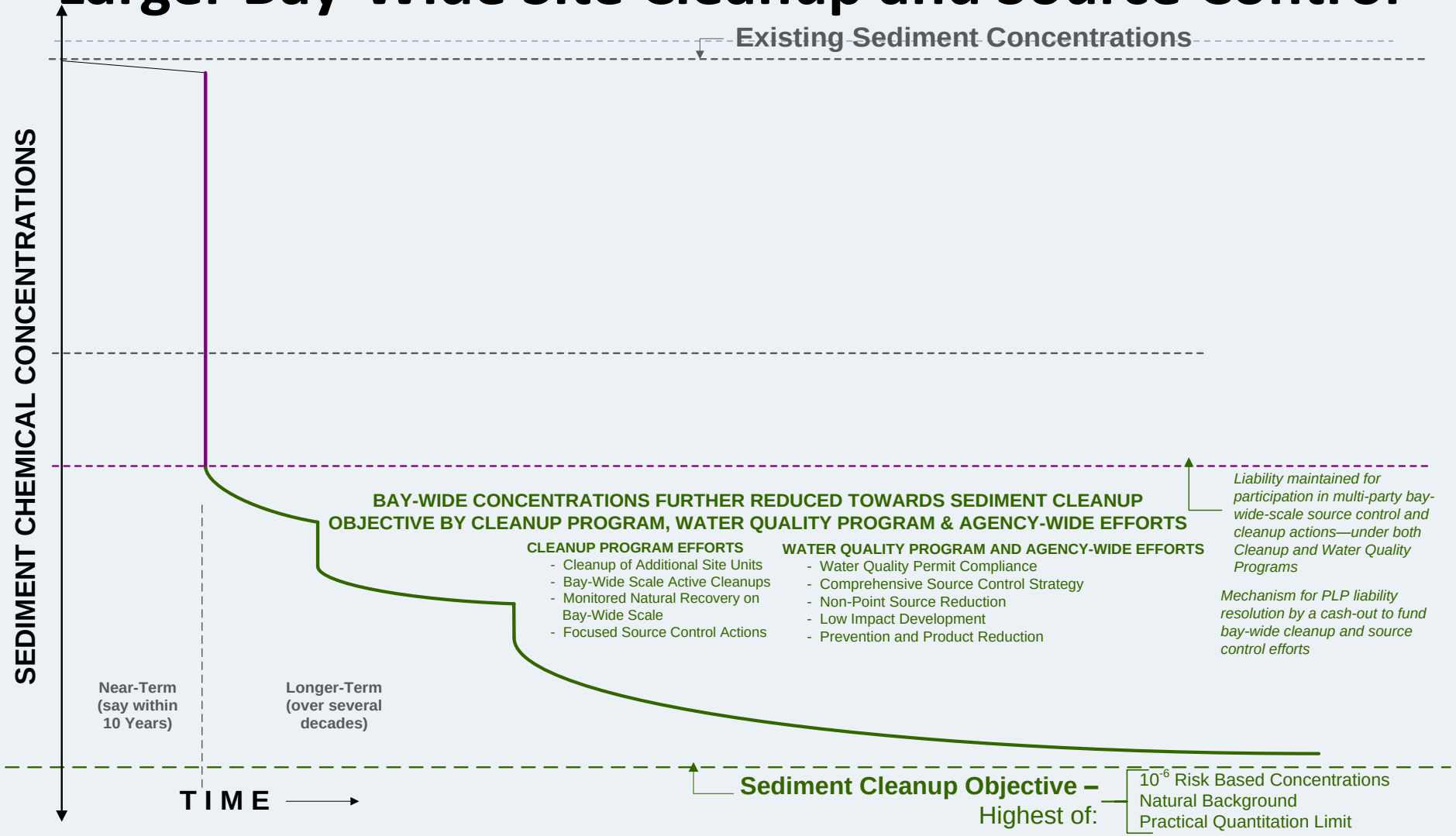
Near Term Risk Reduction
PLP Site Source Control for Unit or Site

- Facility-specific source control required to achieve settlement for sediment cleanup unit
- To prevent sediment contamination above cleanup standard
- Addresses both facility discharges and upland contaminant sources
- PLP must continue to improve BMPs as technology advances to achieve Sediment Cleanup Objective over time.
- SMS rule sections 560, 580, 590 - November mtg.

Longer Term Risk Reduction
Larger Bay-Wide Site Cleanup and Source Control

- Sediment Cleanup Objective is ultimate goal
- Concentrations are reduced towards Sediment Cleanup Objective by:
  - Unit and individual site cleanups and related source control
  - Bay-wide and area-wide cleanup actions
  - Watershed-wide source control actions and toxics reduction
- Role of institutional controls for sediment cleanup and efficacy for long term solutions.

Longer Term Risk Reduction
Larger Bay-Wide Site Cleanup and Source Control



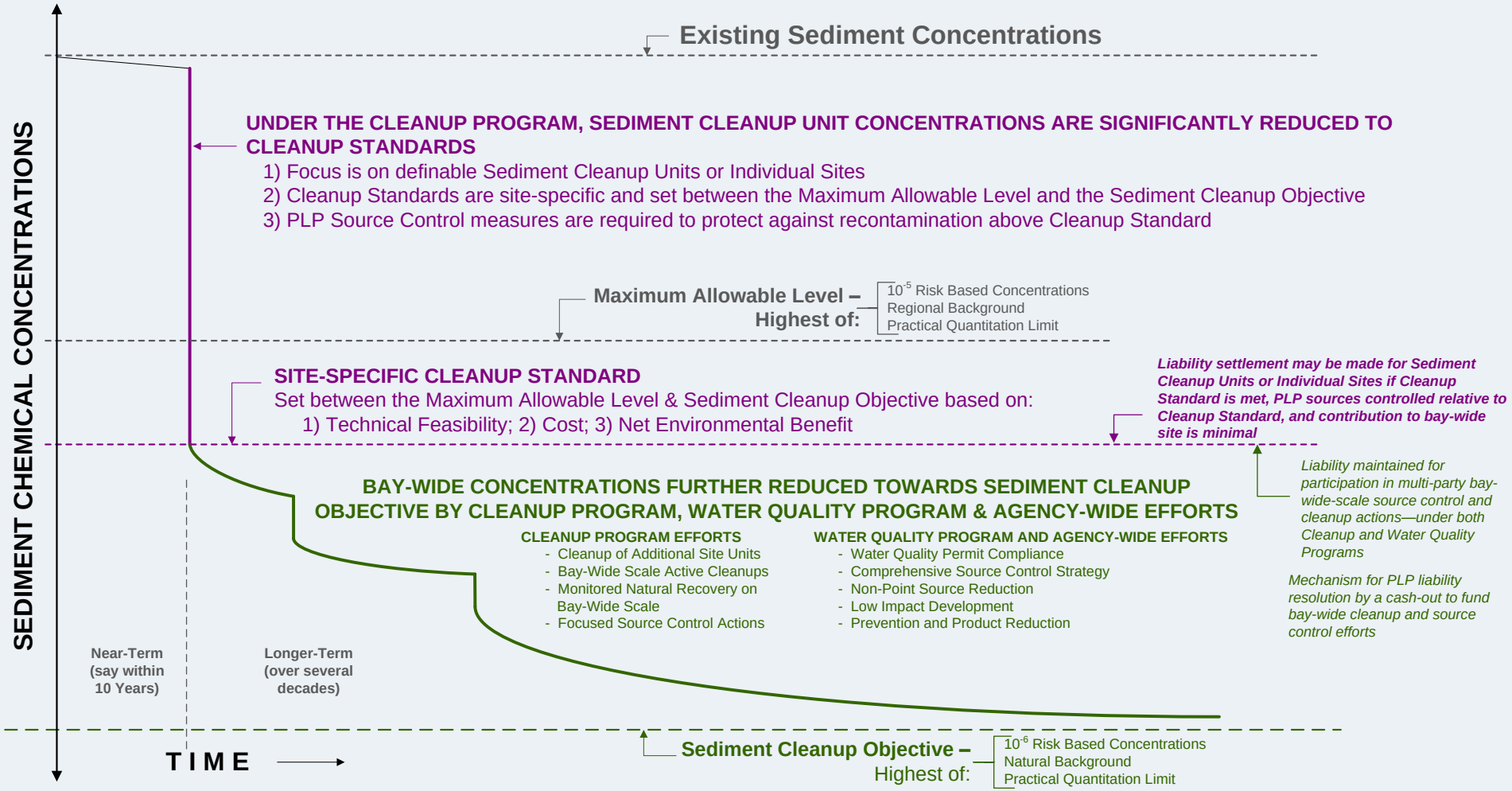
Longer Term Risk Reduction
PLP Funding and Participation for Bay/Watershed-Wide Actions

- PLPs maintain responsibility for participation in larger site efforts
- For PLPs with minimal contribution to bay-wide site, mechanism for cash-out to fund Ecology efforts
- Or participation/funding for multi-party source control and cleanup actions, under both cleanup and water quality programs.

Longer Term Risk Reduction
Ecology Efforts in Bay/Watershed-Wide Actions

- Bay-wide/area-wide monitoring
- Bay-wide/area-wide scale cleanup actions
- Unit cleanups and source control for locations lacking viable PLPs
- Discharge regulation
- Non-point source reduction
- Low-impact development requirements
- Toxics prevention and product reduction.

SMS Framework Proposal
Near term and long term risk reduction



Draft Rule Language Revisions

- We have distributed draft rule language revisions
- We want your input to the proposed framework approach
- And how the rule language supports the framework.

Questions for discussion

- Do you have any clarifying questions about the framework?
- Does the rule language support the framework objectives?
- If not, what changes need to be made?
- Do you have suggestions on how to improve the framework based on your concerns?

SMS Framework Proposal
Near term and long term risk reduction